



## 6.3 References

- 40CFR 141. U.S. Environmental Protection Agency. "National Primary Drinking Water Regulations; Radionuclides; Proposed Rule." *Code of Federal Regulations*.
- 40CFR 265. U.S. Environmental Protection Agency. "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities." *Code of Federal Regulations*.
- 40CFR 300. U.S. Environmental Protection Agency. "National Oil and Hazardous Substances Pollution Contingency Plan." *Code of Federal Regulations*.
- ANL - Argonne National Laboratory. 1997. *RESRAD for Windows, Version 5.781*. Argonne National Laboratory, Environmental Assessment Division, Argonne, Illinois.
- ARH-ST-156. 1977. *Evaluation of Scintillation Probe Profiles from 200 Area Crib Monitoring Wells*. K. R. Fecht, G. V. Last, and K. R. Price, Atlantic Richfield Hanford Company, Richland, Washington.
- BHI-00184. 1995. *Miocene- to Pliocene-Aged Suprabasalt Sediments of the Hanford Site, South-Central Washington*. K. A. Lindsey, Bechtel Hanford, Inc., Richland, Washington.
- BHI-00459. 1996. *Numerical Analysis of Carbon Tetrachloride Movement in the Saturated and Unsaturated Zones in the 200 West Area, Hanford Site*. M. G. Piepho, Bechtel Hanford, Inc., Richland, Washington.
- BHI-00720, Rev. 3. 1999. *Performance Evaluation Report for Soil Vapor Extraction Operations at the Carbon Tetrachloride Site, February 1992 – September 1998*. V. J. Rohay, Bechtel Hanford, Inc., Richland, Washington.
- BHI-01105. 1997. *Rebound Study Report for the Carbon Tetrachloride Soil Vapor Extraction Site, Fiscal Year 1997*. V. J. Rohay, Bechtel Hanford, Inc., Richland, Washington.
- BHI-01271, Rev. 0. 1998. *Data Summary Report for 116-N-1 and 116-N-3 Facility Soil Sampling to Support Remedial Design*. J. D. Ludowise, Bechtel Hanford, Inc., Richland, Washington.
- BHI-01311, Rev. 0. 1999. *Hydrogeologic Conceptual Model for the Carbon Tetrachloride and Uranium/Technetium Plumes in the 200 West Area: 1994 Through 1999 Update*. L. C. Swanson, V. J. Rohay, and J. M. Faurote, Bechtel Hanford, Inc., Richland, Washington.
- BNWL-90. 1965. *Evaluation of Radiological Conditions in the Vicinity of Hanford for 1964*. R. H. Wilson (ed.), Pacific Northwest Laboratory, Richland, Washington.
- BNWL-1970. 1976. *Environmental Monitoring Report on Radiological Status of the Ground Water Beneath the Hanford Site, January-December 1974*. J. R. Raymond, D. A. Myers, J. J. Fix, V. L. McGhan, and P. M. Schrotke, Pacific Northwest Laboratory, Richland, Washington.
- BNWL-CC-701. 1966. *Characterization of Subsurface Contamination in the SX Tank Farm*. J. R. Raymond and E. G. Shdo, Battelle Northwest Laboratories, Richland, Washington.
- Comprehensive Environmental Response, Compensation, and Liability Act. 1980. Public Law 96-150, as amended, 94 Stat. 2767, 42 USC 9601 et seq.
- CVP-98-00006, Rev. 0. 1999. *Cleanup Verification Package for the 116-C-1 Process Effluent Trench*. Bechtel Hanford, Inc., Richland, Washington.
- DOE - U.S. Department of Energy. 1987. *Plan and Schedule to Discontinue Disposal of Liquids Into the Soil Column at the Hanford Site*. Richland, Washington.



DOE/EIS-0119F. 1992. *Decommissioning of Eight Surplus Production Reactors at the Hanford Site, Richland, Washington, Final Environmental Impact Statement*. U.S. Department of Energy, Washington, D.C.

DOE Order 5400.1. "General Environmental Protection Program."

DOE Order 5400.5. "Radiation Protection of the Public and the Environment."

DOE/RL-89-12, Rev. 2. 1995. *Hanford Site Groundwater Protection Management Plan*. D. B. Barnett, J. S. Schmid, S. S. Lowe, W. L. Allen, N. A. Ballantyne, C. H. Dohrer, M. J. Hartman, F. N. Hodges, D. G. Horton, V. G. Johnson, K. J. Lueck, D. J. Ortiz, A. J. Knepp, B. H. Ford, S. P. Hope, D. K. Tyler, R. D. Hildebrand, D. E. Olson, R. E. Peterson, G. L. Kasza, D. A. Myers, S. P. Luttrell, P. D. Thorne, and K. R. Moser. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-91-32, Draft B. 1991. *Expedited Response Action Proposal (EE/CA & EA) for 200 West Area Carbon Tetrachloride Plume, Appendix B*. V. J. Rohay and V. G. Johnson for U.S. Department of Energy, Richland Field Office, Richland, Washington.

DOE/RL-91-50, Rev. 2. 1997. *Environmental Monitoring Plan, United States Department of Energy Richland Operations Office*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-92-04, Rev. 0. 1993. *PUREX Source Aggregate Area Management Study Report*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-92-05, Rev. 0. 1993. *B-Plant Source Aggregate Area Management Study Report*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-92-24, Rev. 3. 1995. *Hanford Site Background: Part 1, Soil Background for Nonradionuclide Analytes*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-92-71, Rev. 2. 1998. *100-D Ponds Closure Plan*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-95-110. 1996. *N-Springs Expedited Response Action Performance Evaluation Report*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-96-12, Rev. 0. 1996. *Hanford Site Background: Part 2, Soil Background for Radionuclides*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-96-39. 1998. *100-NR-1 Treatment, Storage, and Disposal Units Corrective Measure Study/Closure Plan*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-96-102. 1998. *Proposed Plan for Interim Remedial Actions at the 100-NR-1 Source Sites Operable Unit and the 100-NR-2 Groundwater Operable Unit*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-98-48, Draft C. 1998. *Groundwater/Vadose Zone Integration Project Specification*. Prepared by Bechtel Hanford, Inc. for the U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-98-56. 1999. *Groundwater/Vadose Zone Integration Project, Project Management Plan*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-99-02. 1999. *Fiscal Year 1998 Annual Summary Report for the 200-UP-1, 200-ZP-1, and 100-NR-2 Pump-and-Treat Operations and Operable Units*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-99-11, Rev. 0. 1999. *Prototype Barrier Treatability Test Report*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.



DOE/RL-99-13. 1999. *Annual Summary Report, February to December 1998, for the 100-HR-3 and 100-KR-4 Pump-and-Treat Operations and Operable Units*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RL-99-79. 2000. *Fiscal Year 1999 Annual Summary Report for the 200-UP-1, 200-ZP-1, and 100-NR-2 Pump-and-Treat Operations and Operable Units*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

DOE/RW-0164 (2 vols). 1988. *Consultation Draft, Site Characterization Plan, Reference Repository Location, Hanford Site, Washington*. U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Ecology - See Washington State Department of Ecology.

EPA 822-R-96-001. 1996. *Drinking Water Regulations and Health Advisories*. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

ES-SSPM-001. 1998. *Sampling Services Procedures Manual*. Waste Management Federal Services, Inc., Northwest Operations, Richland, Washington.

Fayer, M. J., G. W. Gee, M. L. Rockhold, M. D. Freshley, and T. B. Walters. 1997. "Estimating Recharge Rates for a Groundwater Model Using a GIS." *J. Environ. Qual.* 25:510-518.

Gee, G. W., M. J. Fayer, M. L. Rockhold, and M. D. Campbell. 1992. "Variations in Recharge at the Hanford Site." *Northwest Science* 66(4):237.

GJ-HAN-1. 1995. *Vadose Zone Characterization Project at the Hanford Tank Farms, Tank Summary Data Report for Tank T-110*. Prepared by Rust Geotech for the Grand Junction Projects Office, Grand Junction, Colorado.

GJ-HAN-2. 1995. *Vadose Zone Characterization Project at the Hanford Tank Farms, Tank Summary Data Report for Tank T-107*. Prepared by Rust Geotech for the Grand Junction Projects Office, Grand Junction, Colorado.

GJ-HAN-112. 1998. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-101*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-113. 1998. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-102*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-114. 1998. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-103*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-115. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-101*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-116. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-102*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-117. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-103*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-118. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-104*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.



GJ-HAN-119. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-105*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-120. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-106*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-121. 1998. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-108*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-122. 1998. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-109*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-123. 1998. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-111*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-124. 1998. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank T-112*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-125. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-104*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-126. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-105*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-127. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-106*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-128. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-107*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-129. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-108*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-130. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-109*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-131. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-110*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-132. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-111*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJ-HAN-133. 1999. *Hanford Tank Farms Vadose Zone, Tank Summary Data Report for Tank B-112*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.

GJO-96-13-TAR, GJO-HAN-7. 1997. *Spectrum Shape-Analysis Technique Applied to the Hanford Tank Farms Spectral Gamma Logs*. R. D. Wilson, MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.



- GJO-97-25-TAR, GJO-HAN-15. 1998. *Enhancements, Validations, and Applications of Spectrum Shape-Analysis Techniques Applied to Hanford Tank Farms Spectral Gamma Logs*. R. D. Wilson, MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- GJO-98-64-TAR, GJO-HAN-23. 1999. *Hanford Tank Farms Vadose Zone, A Tank Farm Report*. MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- GJO-99-100-TAR, GJO-HAN-26. 1998. *Hanford Tank Farms Vadose Zone, Sixth Recalibration of Spectral Gamma-Ray Logging Systems Used for Baseline Characterization Measurements in the Hanford Tank Farms*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- GJO-99-101-TAR, GJO-HAN-27. 1999. *Hanford Tank Farms Vadose Zone, T Tank Farm Report*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- GJO-99-113-TAR, GJO-HAN-28. 1999. *Hanford Tank Farms Vadose Zone, B Tank Farm Report*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- GJO-99-118-TAR, GJO-HAN-29. 1998. *Hanford Tank Farms Vadose Zone, Base Calibration of a High Rate Logging System for Characterization of Intense Radiation Zones in the Hanford Tank Farms*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- GJO-2000-142-TAR, GJO-HAN-30. 2000. *Hanford Tank Farms Vadose Zone, Seventh Recalibration of Spectral Gamma-Ray Logging Systems Used for Baseline Characterization Measurements in the Hanford Tank Farms*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- Gupta, S. K. 1997. *Draft User's Manual, CFEST-96 Flow and Solute Transport, Constant/Variable Density, Computationally Efficient, and Low Disk PC/Unix Version*. Environmental System Technologies, Irvine, California.
- Knoll, G. F. 1989. *Radiation Detection and Measurements*, 2nd Ed. John Wiley and Sons, New York.
- MAC-VZCP-1.7.2, Rev. 1. 1997. *Hanford Tank Farms Vadose Zone, Project Management Plan*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- MAC-VZCP-1.7.9, Rev. 1. 1997. *Hanford Tank Farms Vadose Zone, Data Analysis Manual*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- MAC-VZCP-1.7.10-1, Rev. 2. 1997. *Hanford Tank Farms Vadose Zone, High-Resolution Passive Spectral Gamma-Ray Logging Procedures*. Prepared by MACTEC-ERS for U.S. Department of Energy, Grand Junction Office, Grand Junction, Colorado.
- Newcomb, R. C., J. R. Strand, and F. J. Frank. 1972. *Geology and Ground-Water Characteristics of the Hanford Reservation of the U.S. Atomic Energy Commission, Washington*. Geological Survey Professional Paper 717, U.S. Geological Survey, Washington, D.C.
- OSWER 9950-1. 1986. *Ground-Water Monitoring Technical Enforcement Guidance Document*. U.S. Environmental Protection Agency, Washington, D.C.
- Peterson, R. E., and M. P. Connelly. 1992. "Characterization of a Chromium Plume in Groundwater Along the Columbia River Shoreline, Hanford Site, Washington." Presented at 1992 Fall Meeting, American Geophysical Union, San Francisco, California, December 7-11, 1992. *EOS Transactions, American Geophysical Union* 73:43; also WHC-SA-1674-VA, Westinghouse Hanford Company, Richland, Washington.





P-GJPO-1786. 1995. *Vadose Zone Characterization Project at the Hanford Tank Farms, Spectral Gamma-Ray Borehole Geophysical Logging Characterization and Baseline Monitoring Plan for the Hanford Single-Shell Tanks*. Prepared by Rust Geotech for U.S. Department of Energy, Grand Junction Projects Office, Grand Junction, Colorado.

PNL-5041. 1984. *Ground-Water Surveillance at the Hanford Site for CY 1993*. L. S. Prater, J. T. Rieger, C. S. Cline, E. J. Jensen, T. L. Liikala, K. R. Oster, and P. A. Eddy, Pacific Northwest Laboratory, Richland, Washington.

PNL-6328. 1988. *Estimation of Ground-Water Travel Time at the Hanford Site: Description, Past Work, and Future Needs*. M. D. Freshley and M. J. Graham, Pacific Northwest Laboratory, Richland, Washington.

PNL-6456. 1988. *Hazard Ranking System Evaluation of CERCLA Inactive Waste Sites at Hanford*. R. D. Stenner, K. H. Cramer, K. A. Higley, S. J. Jette, D. A. Lamar, T. J. McLaughlin, D. R. Sherwood, and N. C. Van Houten, Pacific Northwest Laboratory, Richland, Washington.

PNL-6825. 1989. *Hanford Site Environmental Report for Calendar Year 1988*. R. E. Jaquish and R. W. Bryce, Pacific Northwest Laboratory, Richland, Washington.

PNL-6886. 1989. *Hanford Site Ground-Water Monitoring for January Through June 1988*. J. C. Evans, R. W. Bryce, and D. R. Sherwood, Pacific Northwest Laboratory, Richland, Washington.

PNL-6894, Rev. 1. 1993. *Procedures for Ground-Water Investigations*. Pacific Northwest Laboratory, Richland, Washington.

PNL-7120. 1989. *Hanford Site Ground-Water Monitoring for July Through December 1988*. J. C. Evans, R. W. Bryce, D. R. Sherwood, M. L. Kemner, and D. R. Newcomer, Pacific Northwest Laboratory, Richland, Washington.

PNL-7144. 1990. *An Initial Inverse Calibration of the Ground-Water Flow Model for the Hanford Unconfined Aquifer*. E. A. Jacobson and M. D. Freshley, Pacific Northwest Laboratory, Richland, Washington.

PNL-7209. 1990. *Field Lysimeter Test Facility: Second Year (FY 1989) Test Results*. M. D. Campbell, G. W. Gee, M. J. Kanyid, and M. L. Rockhold, Pacific Northwest Laboratory, Richland, Washington.

PNL-8073. 1992. *Hanford Site Ground-Water Monitoring for 1990*. J. C. Evans, R. W. Bryce, and D. J. Bates, Pacific Northwest Laboratory, Richland, Washington.

PNL-8337. 1992. *Summary and Evaluation of Available Hydraulic Property Data for the Hanford Site Unconfined Aquifer System*. P. D. Thorne and D. R. Newcomer, Pacific Northwest Laboratory, Richland, Washington.

PNL-8391. 1993. *Testing and Monitoring Plan for the Permanent Isolation Surface Barrier Prototype*. G. W. Gee, L. L. Cadwell, H. D. Freeman, M. W. Ligotke, S. O. Link, R. A. Romine, and W. H. Walters, Jr., Pacific Northwest Laboratory, Richland, Washington.

PNL-8911. 1993. *Field Lysimeter Test Facility Status Report IV: FY 1993*. G. W. Gee, D. G. Felmy, J. C. Ritter, M. D. Campbell, J. L. Downs, M. J. Fayer, R. R. Kirkham, and S. O. Link, Pacific Northwest Laboratory, Richland, Washington.

PNL-10158. 1994. *Summary and Evaluation of Hydraulic Property Data Available for the Hanford Site Upper Basalt Confined Aquifer System*. F. A. Spane, Jr. and V. R. Vermeul, Pacific Northwest Laboratory, Richland, Washington.

PNL-10285. 1995. *Estimated Recharge Rates at the Hanford Site*. M. J. Fayer and T. B. Walters, Pacific Northwest Laboratory, Richland, Washington.



- PNL-10817. 1995. *Hydrochemistry and Hydrogeologic Conditions Within the Hanford Site Upper Basalt Confined Aquifer System*. F. A. Spane, Jr. and W. D. Webber, Pacific Northwest Laboratory, Richland, Washington.
- PNNL-11141. 1996. *Hanford Site Ground-Water Monitoring for 1995*. P. E. Dresel, J. T. Rieger, W. D. Webber, P. D. Thorne, B. M. Gillespie, S. P. Luttrell, S. K. Wurster, and T. L. Liikala, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11367. 1996. *Hanford Protective Barrier Status Report. FY 1996*. G. W. Gee, A. L. Ward, B. G. Gilmore, S. O. Link, G. W. Dennis, and T. K. O'Neil, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11523. 1997. *Combination RCRA Groundwater Monitoring Plan for the 216-A-10, 216-A-36B, and 216-A-37-1 PUREX Crib*s. J. W. Lindberg, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11573. 1997. *Groundwater Monitoring Plan for the 183-H Solar Evaporation Basins*. M. J. Hartman, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11574. 1997. *Results of RCRA Groundwater Quality Assessment Program at the 216-U-12 Crib*. B. A. Williams and C. J. Chou, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11604. 1997. *Results of RCRA Groundwater Quality Assessment at the 216-B-3 Pond Facility*. D. B. Barnett and S. S. Teel, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11809. 1998. *Results of Phase I Groundwater Quality Assessment for Single-Shell Tank Waste Management Areas T and TX-TY at the Hanford Site*. F. N. Hodges, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11810. 1998. *Results of Phase I Groundwater Quality Assessment for Single-Shell Tank Waste Management Areas S-SX at the Hanford Site*. V. G. Johnson and C. J. Chou, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11826. 1998. *Results of Phase I Groundwater Quality Assessment for Single-Shell Tank Waste Management Areas B-BX-BY at the Hanford Site*. S. M. Narbutovskih, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11933. 1998. *Survey of Radiological Contaminants in the Near-Shore Environment at the Hanford Site 100-N Reactor Area*. S. P. Van Verst, C. L. Albin, G. W. Patton, M. L. Blanton, T. M. Poston, A. T. Cooper, and E. J. Antonio, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11958, Rev. 2. 1999. *Monitoring Guidance for Vadose Zone Monitoring of Liquid Waste Disposal Facilities for the Hanford Groundwater Project*. D. G. Horton, S. P. Reidel, and G. V. Last, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-11989, Rev. 1. 1998. *Integrated Monitoring Plan for the Hanford Groundwater Monitoring Project*. M. J. Hartman, P. E. Dresel, J. P. McDonald, R. B. Mercer, D. R. Newcomer, and E. C. Thornton, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-12023. 1998. *Groundwater Monitoring for the 100-K Area Fuel-Storage Basins: July 1996 through April 1998*. V. G. Johnson, C. J. Chou, M. J. Hartman, and W. D. Webber, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-12222. 1999. *Monitoring Plan for Fiscal Year 1999 Borehole Logging at 200 East Area Specific Retention Facilities*. D. G. Horton, Pacific Northwest National Laboratory, Richland, Washington.
- PNNL-12227. 1999. *Groundwater Monitoring Plan for the Nonradioactive Dangerous Waste Landfill*. J. W. Lindberg and M. J. Hartman, Pacific Northwest National Laboratory, Richland, Washington.



PNNL-12086. 1999. *Hanford Site Groundwater Monitoring for Fiscal Year 1998*. M. J. Hartman (ed.). Pacific Northwest National Laboratory, Richland, Washington.

PNNL-12088. 1999. *Hanford Site 1998 Environmental Report*. R. L. Dirkes, R. W. Hanf, and T. M. Poston (eds.), Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13021. 1999. *Water-Level Monitoring Plan for the Hanford Groundwater Monitoring Project*. J. P. McDonald, M. A. Chamness, and D. R. Newcomer, Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13047. 1999. *Groundwater Monitoring Plan for the 216-A-29 Ditch*. M. D. Sweeney, Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13058. 1999. *Results of Tritium Tracking and Groundwater Monitoring at the Hanford Site 200 Area State-Approved Land Disposal Site--FY 1999*. D. B. Barnett, Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13077. 1999. *Results of 1999 Spectral Gamma-Ray and Neutron Moisture Monitoring of Boreholes at Specific Retention Facilities in the 200 East Area, Hanford Site*. D. G. Horton and R. R. Randall, Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13080. 2000. *Hanford Site Groundwater: Settings, Sources, and Methods*. M. J. Hartman (ed.), Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13116. 2000. *Hanford Site Groundwater Monitoring for Fiscal Year 1999*. M. J. Hartman, L. F. Morasch, and W. D. Webber (eds.), Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13185. 2000. *Groundwater Quality Assessment Plan for Single-Shell Tank Waste Management Area U at the Hanford Site*. F. N. Hodges and C. J. Chou, Pacific Northwest National Laboratory, Richland, Washington.

PNNL-13228. 2000. *Evaluation of Elevated Tritium Levels in Groundwater Downgradient from the 618-11 Burial Ground Phase I Investigations*. P. E. Dresel, B. A. Williams, J. C. Evans, R. M. Smith, C. J. Thompson, and L. C. Hulstrom, Pacific Northwest National Laboratory, Richland, Washington.

Poreda, R. J., T. E. Cerling, and D. K. Salomon. 1988. "Tritium and Helium Isotopes as Hydrologic Tracers in a Shallow Unconfined Aquifer." *Journal of Hydrology* 103:1-9.

Record of Decision. 1996. *Record of Decision for the 300-FFf-1 and 300-FF-5 Operable Units*. State of Washington Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Record of Decision. 1997. *Declaration of the Record of Decision, U.S. DOE Hanford 200 Area, Hanford Site, Benton County, Washington (200-UP-1)*. State of Washington Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Resource Conservation and Recovery Act. 1976. Public Law 94-580, as amended, 90 Stat. 2795, 42 USC 6901 et seq.

RHO-BWI-ST-5. 1979. *Hydrologic Studies Within the Columbia Plateau, Washington: An Integration of Current Knowledge*. R. E. Gephart, R. C. Arnett, R. G. Baca, L. S. Leonhart, F. A. Spane, Jr., D. A. Palumbo, and S. R. Strait, Rockwell Hanford Operations, Richland, Washington.

RHO-RE-ST-12 P. 1984. *An Assessment of Aquifer Intercommunication in the B Pond - Gable Mountain Pond Area of the Hanford Site*. M. J. Graham, G. V. Last, and K. R. Fecht, Rockwell Hanford Operations, Richland, Washington.





- RHO-ST-42. 1981. *Hydrology of the Separations Area*. M. J. Graham, M. D. Hall, S. R. Strait, and W. R. Brown, Rockwell Hanford Operations, Richland, Washington.
- Soldat, J. K. 1976. "Radiation Doses from Iodine-129 in the Environment." *Health Physics* 30:61-70.
- SW-846. 1986. *Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods*, 3rd ed. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C.
- Ward, A. L., and G. W. Gee. 1997., "Performance Evaluation of a Field-Scale Surface Barrier." *J. Environ. Qual.* 26:694-705.
- WAC 173-303. "Dangerous Waste Regulations." Washington Administrative Code, Olympia, Washington.
- WAC 173-303-645. "Releases from Regulated Units." Washington Administrative Code, Olympia, Washington.
- WAC 173-304. "Minimal Functional Standards for Solid Waste Handling." Washington Administrative Code, Olympia, Washington.
- Washington State Department of Ecology. 1994. *Dangerous Waste Portion of the Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste*, as amended. Permit Number WA7890008967, effective September 28, 1994, Olympia, Washington.
- Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy. 1998. *Hanford Federal Facility Agreement and Consent Order*. Document No. 89-10, Rev. 5 (The Tri-Party Agreement), Olympia, Washington.
- WHC-EP-0527-2. 1993. *Environmental Releases for Calendar Year 1992*. L. P. Diediker and D. J. Rokkan, Westinghouse Hanford Company, Richland, Washington.
- WHC-MR-0227. 1991. *Tank Wastes Discharged Directly to the Soil at the Hanford Site*. J. L. Waite, Westinghouse Hanford Company, Richland, Washington.
- WHC-MR-0388. 1992. *Past Practices Technical Characterization Study - 300 Area - Hanford Site*. M. S. Gerber, Westinghouse Hanford Company, Richland, Washington.
- WHC-MR-0391. 1992. *Field Trip Guide to the Hanford Site*. S. P. Reidel, K. A. Lindsey, and K. R. Fecht, Westinghouse Hanford Company, Richland, Washington.
- WHC-SD-EN-AP-024, Rev. 1. 1991. *Interim Status Groundwater Monitoring Plan for the 200 East Area Liquid Effluent Retention Facility*. J. S. Schmid, Westinghouse Hanford Company, Richland, Washington.
- WHC-SD-EN-AP-038, Rev. 2. 1996. *Groundwater Monitoring Plan for the 1301-N, 1325-N, and 1324-N/NA Sites*. M. J. Hartman, Westinghouse Hanford Company, Richland, Washington.
- WHC-SD-EN-AP-132, Rev. 0. 1993. *Interim-Status Groundwater Quality Assessment Plan for the Single Shell Tank Waste Management Areas T and TX-TY*. J. A. Caggiano and C. J. Chou, Westinghouse Hanford Company, Richland, Washington.
- WHC-SD-EN-AP-185, Rev. 0. 1995. *Groundwater Monitoring Plan for the 300 Area Process Trenches*. J. W. Lindberg, C. J. Chou, and V. G. Johnson, Westinghouse Hanford Company, Richland, Washington.
- WHC-SD-EN-AP-191. 1996. *Assessment Groundwater Monitoring Plan for Single-Shell Tank Waste Management Area S-SX*. J. A. Caggiano, Westinghouse Hanford Company, Richland, Washington.
- WHC-SD-EN-EV-003, Rev. 1. 1992. *Results of Groundwater Quality Assessment Monitoring at the 1301-N and 1324-N/NA Facilities*. M. J. Hartman, Westinghouse Hanford Company, Richland, Washington.



WHC-SD-EN-RPT-004. 1993. *Summary of 100-B/C Reactor Operations and Resultant Wastes, Hanford Site*. M. S. Gerber, Westinghouse Hanford Company, Richland, Washington.

WHC-SD-EN-TI-014. 1992. *Hydrogeologic Model for the 200 West Groundwater Aggregate Area*. M. P. Connelly, B. H. Ford, and J. V. Borghese, Westinghouse Hanford Company, Richland, Washington.

WHC-SD-EN-TI-019. 1992. *Hydrogeologic Model for the 200 East Groundwater Aggregate Area*. M. P. Connelly, B. H. Ford, J. W. Lindberg, S. J. Trent, and C. D. Delaney, Westinghouse Hanford Company, Richland, Washington.

WHC-SD-EN-TI-101. 1993. *Carbon Tetrachloride Evaporative Losses and Residual Inventory Beneath 200 West Area at the Hanford Site*. Westinghouse Hanford Company, Richland, Washington.

WHC-SD-EN-TI-248. 1994. *1994 Conceptual Model of the Carbon Tetrachloride Contamination in the 200 West Area at the Hanford Site*. V. J. Rohay, K. J. Swett, and G. V. Last, Westinghouse Hanford Company, Richland, Washington.

WHC-SD-ENV-AP-002, Rev. 0. 1996. *Assessment Groundwater Monitoring Plan for SST Waste Management Area B-BX-BY*. J. A. Caggiano, Westinghouse Hanford Company, Richland, Washington.

WHC-SD-LEF-EV-001, Rev. 0. 1996. *Effluent Variability Study Results for the 200 Area Effluent Disposal Facility (W-049H)*. C. J. Chou and V. G. Johnson, Westinghouse Hanford Company, Richland, Washington.